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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,108	02/07/2001	Aaron Demello	44117-118	4451
7590	09/15/2005		EXAMINER	
Alexander Miller Profilium 152 Notre Dame East Montreal, H2Y3P6 CANADA			NGUYEN, QUANG N	
			ART UNIT	PAPER NUMBER
			2141	

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/778,108

Applicant(s)

DEMELLO ET AL.

Examiner

Quang N. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 73-91 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 73-91 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Detailed Action***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/19/2005 has been entered.

Claims 50-72 are canceled without prejudice or disclaimer. Claims 73-91 have been added as new claims. Claims 73-91 remain for examination.

***Drawings***

2. The drawing of Fig. 3 is objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: ***Mobile Location Gateways (MLG) 17 as mentioned in the specification, page 16, lines 15-27.***

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet

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submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 74-84 and 86-91 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

5. Claims 74-84 and 86-91 recite the limitation "**A method according to claim 1, claim 2, claim 5, claim 8, claim 9 and claim 13**" in line 1. Since claims 1, 2, 5, 8, 9 and 13 have been cancelled, there is insufficient antecedent basis for this limitation in the claims.

Examiner will assume that claim 1 is claim 73 and claim 13 is claim 85 for the purpose of examining the application.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 73-81 and 83-84 is rejected under 35 U.S.C. 102(e) as being anticipated by Sheynblat et al. (US 6,677,894), hereinafter referred as Sheynblat.**

8. As to claim 73, Sheynblat teaches a method for identifying and profiling wireless terminals, comprising:

(a) extracting continuously from a wireless network said network data transmitted from each of a plurality of wireless terminals over the period of time at said periodic time intervals *(in wireless network environment, periodically, information about the location of the client may be determined based on location or other characteristic of the interface when the client turns on the mobile GPS receivers, or establishes communication with a particular cell site location, a particular telephone number, a Web site/server, etc.)* (Sheynblat, C19: L1-14 and C20:L57 – C21:L4);

(b) determining the location of each of the plurality of wireless terminals when said network data are detected *(a position calculation is performed by the GPS location*

*server after receiving pseudo ranges from the mobile GPS receiver through the mobile switching center and the regional SMSC) (Sheynblat, C15: L21-27);*

(c) storing the determined location of each of the plurality of wireless terminals over a period of time at said periodic intervals *(the Web server or other device may use the location of the client over a period of time to derive representations/charts/graphs of cellular use demographics, such as time and place of calls, location-based and/or time-based distributions, etc.) (Sheynblat, C21: L23-35);*

(d) formulating the location history for each of the plurality of wireless terminals based on their respective stored locations over the period of time at said periodic time intervals *(the presentations/charts/graphs of cellular use demographics, such as time and place of calls maybe useful for advertising, user profiling, i.e., formulating location history) (Sheynblat, C21: L23-37);*

(e) determining whether any of the formulated location histories for any of the plurality of wireless terminals corresponds to any of a plurality of predetermined patterns of interest *(the Web server may display the locations of various mobile GPS receivers/users with time tags, such information maybe useful for advertising or customers/users profiling, location-targeted marketing, etc.) (Sheynblat, C21: L23-37).*

9. As to claim 74, Sheynblat teaches the method of claim 73, wherein mobile terminals take part in habitual activities defined by physical movements of the mobile terminals around plurality of geographical points of their interest *(a system receiving location-based information may use this information to decide if a particular service is*

*allowed at the client's present location and/or time and/or a location or time of interest)*

(Sheynblat, C21: L41-44).

10. As to claim 75, Sheynblat teaches the method of claim 74, wherein said geographical points of interests are situated within the radio coverage of the wireless network *(inherently, in order to establish a communication with a telephone number, a Web site/server, the client's present location of interest must be situated within the radio coverage of the wireless network, i.e., the cell base station)*.

11. As to claim 76, Sheynblat teaches the method of claim 73, wherein said step of extracting includes establishing a physical interface with the wireless network over one of passive interfaces *(the pseudo ranges received from the mobile GPS receivers are normally received through the cell site and mobile switching center and the modem or other interface 53)* (Sheynblat, C9:L65 - C10:L12).

12. As to claim 77, Sheynblat teaches the method of claim 73, wherein said step of determining includes determining which, if any, of said wireless terminals has had a location at or near of a plurality of predetermined points of interest at or about a particular time of interest *(a system receiving location-based information may use this information to decide if a particular service is allowed at the client's present location and/or time and/or a location or time of interest)* (Sheynblat, C21: L41-44).

13. As to claim 78, Sheynblat teaches the method of claim 77, further comprising the step of isolating the location history of any of said wireless terminals which either corresponds to any of predetermined patterns of interest or has had a position at or near of a plurality of predetermined points of interest at or about a particular time of interest (*a system receiving location-based information may use this information to decide if a particular service is allowed at the client's present location and/or time and/or a location or time of interest*) (Sheynblat, C21: L41-44).

14. As to claim 79, Sheynblat teaches the method of claim 73, wherein said network data include periodic registration data and periodic RF signals transmitted over the wireless network (*the Web server or other device may determine information about the location of the client based on a particular cell site location, a particular telephone number, time of log-on/call, time and place of calls, location-based and time-based distributions, etc.*) (Sheynblat, C20:L57 – C21:L44).

15. As to claims 80-81, Sheynblat teaches the method of claim 73, wherein said step of extracting includes associating of said network data with a unique identifier of the wireless terminal, wherein said unique identifier may include one or any combination of mobile directory number (MDN), Electronic Serial Number (ESN), Mobile Identity Number (MIN), Mobile Subscriber Identification (MSI), International Mobile Subscriber Identity (IMSI) (*a mobile unit 72, which is typically a "location enabled" mobile unit, may provide a mobile identification number "MIN"*) (Sheynblat, C21: L50-56).

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16. As to claim 83, Sheynblat teaches the method of claim 73, wherein said step of determining location includes calculation location of wireless terminals using information contained in said network data such as Cell ID and radio transmission parameters *(calculating location of wireless terminals using a particular cell site location/ID and pseudo ranges)* (Sheynblat, C21: L50-56).

17. As to claim 84, Sheynblat teaches the method of claim 73, wherein behavioral pattern is defined in part as a combination of time and location characteristics of wireless terminal movements at or near of a plurality of predetermined points of interest *(a system receiving location-based information may use this information for advertising, customer/user profiles, location-targeted marketing, etc., i.e., defining behavioral pattern based in part on the combination of time and location characteristics of wireless terminal movements)* (Sheynblat, C21: L23-44).

### ***Claim Rejections - 35 USC § 103***

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. **Claims 82 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sheynblat, in view of Pettovello (US 6,449,621).**

20. As to claim 82, Sheynblat teaches the method of claim 81 but does not explicitly teach the step of converting said unique identifier into an anonymous identifier that has a low correlation with one or more of said set of wireless terminal identifiers or a combination thereof.

In a related art, Pettovello teaches a privacy data escrow system and method, wherein an escrow agent 16 creates a universal anonymous identifier (*an anonymous identifier*) for substituting a scrambled person identifier (*the unique identifier*) and once substituted, all data belonging to a person stored in the database 20 are identified by or associated with the same unique universal anonymous identifier (*i.e., creating a record of said data associated with said anonymous identifier*) (Pettovello, C3:L60 - C4:L8).

Therefore, it would have been obvious to one having ordinary skills in the art at the time the invention was made to combine the teachings of Sheynblat and Pettovello to include the step of converting said unique identifier into an anonymous identifier that has a low correlation with one or more of said set of wireless terminal identifiers or a combination thereof since such methods were conventionally employed in the art to maintain/protect the confidentiality of privacy, personal identification data such as name, address, email, telephone numbers, personal financial/demographic data of the user by generating an anonymous identifier to substitute for the user unique identifier.

**21. Claims 85-91 are corresponding system claims of method claims 73-84; therefore, they are rejected under the same rationale.**

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22. A shortened statutory period for reply to this action is set to expire THREE (3) months from the mailing date of this communication. See 37 CFR 1.134.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang N. Nguyen whose telephone number is (571) 272-3886.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's SPE, Rupal Dharia, can be reached at (571) 272-3880. The fax phone number for the organization is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
RUPAL DHARIA  
SUPERVISORY PATENT EXAMINER